

REMARKS

I. Status of the Claims

Claims 48-62 and 64-77 are pending. Claims 1-47 were previously canceled and claim 63 is canceled herein without prejudice or disclaimer. Applicants reserve the right to file one or more continuing applications to any canceled subject matter. Claims 48, 54, 60, 64, 70, 73 and 75 are amended for the reasons that follow.

Claims 48, 54, 60, and 70 are amended to delete recitation of "in said composition."

Claim 60 also is amended to make clear that the claimed nucleic acid molecule and adjuvant "are coated onto core carrier particles." This qualification previously appeared in claim 63. Applicants incorporated that qualification into existing claim 60 and canceled claim 63 to avoid redundancy.

Claims 64 and 75 are amended simply to ensure appropriate claim dependencies.

Claim 73 is amended to replace "particles" with "antigen" simply to ensure correct antecedent basis with claim 60.

Applicants assert that none of these amendments introduce new matter and therefore respectfully request their entry.

II. Status of the Specification

Applicants thank the Examiner for pointing out that certain sequences denoted in the application require appropriate identifiers and an accompanying sequence listing. See page 8 of the office action. In accordance with 37 C.F.R. 1.821 - 1.825, Applicants provide paper and electronic copies of a sequence listing and an amended specification, which recites the appropriate "SEQ ID NOs" for every recitation of, for example, the following sequences that appear in the specification: (1) TCCATGACGTTCTGATGCT (page 24, line 6); (2) GACTCTCGAGCGTTCTC (page 24, line 7); (3) TYQRTRALV (page 43, lines 21, 24

and 25; and page 45, lines 7, 9 and 10); (4) RGPGRAPHVTI (page 46, lines 26 and 28); and (5) IPQSLDSWWTSL (page 48, line 30).

III. Applicants have amended the claims to expedite prosecution and to resolve any alleged indefiniteness issues

Claims 48-77 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. See page 3 of the office action.

Specifically, claim 48 is rejected as lacking antecedent basis for “said composition” as recited in line 5. The reference to “in said composition” has now been deleted from claim 48. It is submitted that this amendment deals fully with the Examiner’s concerns and also with the Examiner’s comments in respect of claim 49 to 59 insofar as they depend on claim 48.

A similar rejection is raised in respect of claim 60 and claims 61 to 77 insofar as they depend on claim 60. Again, the reference to “in said composition” has now been deleted from claim 60 and it is submitted that this amendment overcomes the Examiner’s rejection in relation to claims 60 to 77.

Claims 54 and 70 are rejected insofar as they recite that “the adjuvant is present in the composition in the form of a lipid.” The rejection also includes claims 55 and 71 insofar as they depend on claims 54 and 70 respectively. Reference to “in the composition” has now been deleted from claims 54 and 70 and it is submitted that these amendments deal fully with the Examiner’s comments.

Claim 73 is rejected as lacking antecedent basis for “said particles.” The reference to “said particles” has now been replaced with a reference to “said antigen.” It is submitted that there is proper antecedent basis for the new reference to “said antigen” both in claim 73 itself and in claim 60 (on which claim 73 depends).

Claim 74 is rejected as lacking antecedent basis for “said core carrier particles.” Claim 60 has now been amended so that it does indeed refer to “core carrier particles.” In view of this, it is submitted that there is now proper antecedent basis for “said core carrier particles” in claim 74.

Claim 75 is rejected as lacking antecedent basis for “said gold particles.” Claim 75 has been amended so that it now depends on claim 74 (not on claim 60). Claim 74 refers to “gold particles” and, on that basis, it is submitted that there is now proper antecedent basis for the reference to “said gold particles” in claim 75.

Accordingly, Applicants believe that all of the alleged indefiniteness issues are overcome and respectfully request withdrawal of those particular rejections.

IV. Independent claim 60, which requires a “core carrier,” is not taught by Spitler and therefore claim 60 and its dependent claims not anticipated by Spitler

Claims 60 to 62, 65 and 69 to 73 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Spitler *et al.* (US 5,925,362). See page 4 of the office action. The Examiner argues that Spitler *et al.* teaches the use of liposomes to administer a combination of a nucleic acid encoding an antigen and a non-DNA adjuvant, focusing in particular on claims 5 to 7 of Spitler *et al.*

The Examiner does, however, acknowledge that claim 63 is considered free from the prior art of record because claim 63 requires coating core carrier particles with the recited nucleic acids and adjuvants, while none of the prior art, Spitler included, contemplates, suggests or teaches such a composition. See page 8 of the office action.

That “core carrier” subject matter is now incorporated into claim 63. Accordingly, it is submitted that new claim 60 is free from the prior art of record, *i.e.* is not anticipated by Spitler *et al.* All of claims 61, 62 and 69 to 73 depend, either directly or indirectly, on new claim 60 and, in view of that, it is submitted that they are not anticipated by Spitler *et al.*

For at least these reasons, Applicants assert that Spitler does not apply and respectfully request that the Examiner withdraw this rejection.

V. None of the cited art teaches or provides any motivation for formulating the claimed composition, which comprises a “core carrier” element, as acknowledged by the Examiner at page 8 of the office action

Claims 66-68 are rejected under 35 U.S.C. § 103(a) as unpatentable over Spitler (*supra*) in view of Fynan *et al.*, Golding *et al.* and Sedegah *et al.* See pages 6 to 8 of the

office action. In essence, the Examiner argues that claims 66 to 68 differ from Spitler *et al.* only in that those claims concern the use of viral, bacterial, parasite or fungal pathogen antigen as opposed to a tumour antigen.

Applicants assert that claims 66 to 68 depend on new claim 60. It is submitted that new claim 60 is free from the prior art of record for the reasons set out in the preceding subsection. That is, claim 60 requires coating core carrier particles with the recited nucleic acids and adjuvants, which is not taught by any of the prior art references. As the Examiner acknowledges "[N]one of Fynan *et al.*, Golding *et al.* and Sedegah *et al.* nor Golding teach coating core carrier particles with non-DNA adjuvant and Spitler . . . does not provide motivation for coating a core carrier particle with the non-DNA adjuvant." Office action at page 8.

Thus, the prior art does not teach and provides no motivation for producing the claimed subject matter. In view of this distinction, Applicants submit that claims 66 to 68 are free from the prior art of record and are not obvious in view of the applied art. Applicants therefore respectfully request that the Examiner withdraw this rejection.

VI. Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone, however, if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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